



# The Commonwealth of Massachusetts

## DEPARTMENT OF PUBLIC UTILITIES

June 30, 1947

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P97r  
1947

*Massachusetts. Dept. of Public Utilities.  
Annual report.*

To the Honorable Senate and House of Representatives

We respectfully submit the twenty-eighth Annual Report of the Department of Public Utilities for the fiscal year ending June 30, 1947.

Edward N. Gadsby of North Adams, having been appointed a Commissioner, assumed the duties of the office on February 13, 1947, succeeding Hirsh Freed whose term expired.



Returns

The number of corporations, private and municipal, persons, firms and associations under the jurisdiction of and filing annual returns for year ending December 31, 1946, with the Department, exclusive of those filing under the Sale of Securities Act, is as follows:

Steam railroads.....	19	Manufacturing and other	
Street Railways.....	15	companies and persons	
Telephone Companies.....	7	doing an electric	
Telegraph Companies.....	2	business.....	4
Steamboat Companies.....	3	Water Companies.....	71
Sleeping Car Companies.....	1	Motor Bus Lines.....	73
Express Companies.....	2	Municipal Lighting Plants...	41
Gas Companies.....	43	Voluntary Associations.....	17
Electric Companies.....	28	Affiliates of gas and	
		electric companies.....	3
		Total.....	329

In addition to the above, there are within the jurisdiction of the Department 668 regular route common carriers, 8274 irregular route common carriers, 1186 contract carriers operating motor vehicles for the transportation of property for compensation between points within the Commonwealth, 2212 interstate licensed carriers, 62 agricultural carriers, and 5 licensed transportation brokers.

During the fiscal year the Commission held 439 formal hearings, 23 conferences, and made 34 views in connection with grade crossing protection petitions. The volume and character of the work requiring the attention of the Department during the fiscal year is shown by the following tabulation.



Petitions and Applications

Railroads..... 139  
Street Railway..... 158  
Gas and Electric..... 122  
Water..... 9  
Motor Bus..... 164  
Motor Truck..... 118  
Telephone and Telegraph..... 4

Steamship..... 10  
Sale of Securities..... 2  
Miscellaneous..... 53  
  
Total..... 779

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Complaints

Railroads..... 113  
Street Railway..... 5  
Gas..... 131  
Electric..... 237  
Water..... 28  
Motor Bus..... 101

Motor Truck..... 422  
Telephone and Telegraph..... 1336  
Sale of Securities..... 12  
Smoke Abatement..... 200  
  
Total..... 2585

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Rate Schedules & Contracts

Railroad Freight Service..... 1405  
Passenger Service..... 122  
Express..... 76  
Street Railway and Busses..... 161  
Telephone..... 64  
Telegraph..... 9  
Steamship Freight..... 10  
Steamship Passengers..... 20

Motor Truck..... 4675  
Air Freight..... 14  
Air Craft Passenger..... 27  
Electricity..... 222  
Gas..... 164  
Water..... 3  
Gas & Electric Contracts..... 144  
Total..... 7116

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The Receipts of the Department of Public Utilities for the fiscal period from July 1, 1946 to June 30, 1947, are given below:

GAS, ELECTRIC AND WATER DIVISION:

Fees, gas meter tests, . . . . .	29,414.35	
Fees, electric meter tests, . . . . .	<del>\$29,409.35</del>	
Sales, blank forms, classification . .	3.00	
of accounts, etc. . . . .	390.50	
	<u>395.50</u>	\$29,807.85

PUBLIC SERVICE DIVISION:

Motor busses:		
Fees, bus permits, . . . . .	8,003.00	
Fees, drivers' licenses, . . . . .	<u>8,195.00</u>	16,198.00

Miscellaneous:

Sales - blank forms, . . . . .	21.45	21.45
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COMMERCIAL MOTOR VEHICLE DIVISION:

Motor trucks:

Fees, Common Carrier Certificates, . . . . .	15,910.00	
Fees, Contract Carrier Permits, . . . . .	<del>16,060.00</del>	
Fees, distinguishing plates, . . . . .	1,805.00	
Fees, miscellaneous plate receipts . . . . .	<del>138,569.00</del>	138,717.22
Fees, copies of documents, . . . . .	353.00	354.25
	<u>253.75</u>	157,040.75

SECURITIES DIVISION:

Fees, registration of brokers, . . . . .	23,650.00	
Fees, registration of salesmen, . . . . .	<u>11,390.00</u>	35,040.00

<u>RENT OF LAND, in Cambridge, . . . . .</u>	3,250.00	3,250.00
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MISCELLANEOUS:

Postage, . . . . .	198.22 <sup>75</sup>	
Federal tax on telephone calls . . . . .	<u>8.16</u>	206.38 <sup>91</sup>
Railroad Inquest Assessments		<u>288.93</u>

FINANCIAL STATEMENT VERIFIED TOTAL  
(Under Requirements of C. 7, S 19 GL)

Date February 5, 1948

By Joseph A. Preney  
For the Comptroller

Approved for Publishing

Frank M. Mearns  
Comptroller

\$241,564.43  
241,853.36



Metropolitan Transit Recess Commission

This Commission is composed of 14 members: The Lt. Governor, one member of the Senate, seven members of the House of Representatives and the five commissioners of the Department of Public Utilities.

This Commission was organized as of September 24, 1945 as follows:

Lt. Governor, Arthur W. Coolidge, Chairman  
Rep. Peter J. Jordan, Vice Chairman  
Rep. Hallam T. Ring, Secretary  
Carroll L. Meins, Administrative Chairman

together with the following members:

Senator Richard I. Furbush	
Rep. Robert P. Campbell	
Rep. Richard J. Allen	
Rep. Robert G. Connelley	
Rep. Dennis P. Glynn	
Rep. Albert E. Roberts	
Francis M. McKeown )	Commissioners of the
John M. Whouley )	Department
Thomas A. Flaherty )	of Public
David M. Brackman )	Utilities

Judge Gilbert W. Cox, Counsel

This Commission, created under Chapter 56 of the Resolves of 1943 was revived, continued and enlarged under Chapter 85 of the Resolves of 1945. This Resolve was approved July 25, 1945 and ordered a report to the legislature on or before December 1, 1946. By this later Resolve, the membership of the Commission was increased from nine to fifteen by the addition of a member from the Senate and five more members from the House.

Public hearings were held during this period in accordance with the provisions of the Resolve in the following cities and towns of the district: Lexington, Arlington, Woburn, Winchester, Medford, Re-



vere, Newton, Braintree, Quincy and Weymouth. During the year, new plans were prepared for the proposed route from Harvard Square to Lexington and to Waltham. The whole subject of feeder bus service has been under continual study and work and is going forward on the new report to be submitted to the legislature by December 1, 1946.

Since July 1, 1946 the Recess Commission has been engaged in conducting a study on rapid transit and the preparation of its report. During the legislative session of 1946 several bills were referred to the Commission "in the course of its work to investigate and report".

An interim report was filed with the Legislature on December 1, 1946, and at the same time a request was filed by the Recess Commission that the time for filing a final report be extended until May 1, 1947, which request was granted. Final report was filed April 1, 1947. Public hearings were held on this report before Joint Legislative Committees on Transportation and Metropolitan Affairs. These Committees recommend certain legislation, namely, Senate 593, which was passed and enacted by the House of Representatives and Senate, signed by the Governor. This legislation, Chapter 544, Acts of 1947, created the Metropolitan Transit Authority.



Capital Stock and Bonds

Sixteen applications for approval of an issue of stock, bonds or notes have been decided during the period from July 1, 1946 to June 30, 1947. The par value of the securities asked for was \$14,735,300 and the par value of the securities approved was \$14,215,300.

The following table shows the securities approved by the Commission for the several companies applying therefor, giving both the par value of the stock and the issue price thereof, determined as required by law.

Company	<u>Capital Stock Approved</u>			Bonds Approved At Par	Date
	Amount at Par	Issue Price	Value Issue Price		
Brockton Gas Light Co.				\$705,000 <sup>1.</sup>	7/22/46
Buzzards Bay Gas Co. PFD.	\$315,000	\$25	\$315,000	600,000 <sup>2.</sup>	7/2/46
" " " "	95,000	25	95,000		7/2/46
Cambridge Electric Lt. Co.				3,338,000 <sup>3.</sup>	7/16/46
Cape & Vineyard Elec. Co.	75,000	50	150,000		12/9/46
Dedham & Hyde Park Gas Co.	150,000	25	150,000	125,000 <sup>4.</sup>	12/10/46
Eastern Mass. St. Ry. Co.				1,000,000 <sup>5.</sup>	7/8/46
Eastern Mass. St. Ry. Co.				1,500,000 <sup>5.</sup>	4/30/47
Edgartown Water Co.				32,500	1/3/47
Gilbertville Water Co.	65,000	100	65,000		12/31/46
New Bedford Gas & Ed.Lt.Co.	93,750	25	250,000		12/10/46
Norwich & Worcester Rail- road Co.				1,800,000 <sup>6.</sup>	2/28/47
Plymouth County Electric Co.	62,950	31.25	78,687.50		12/9/46
Provincetown Lt. & Pr. Co.	12,500	100	12,500		7/22/46
Springfield Gas Light Co.				200,000 <sup>7.</sup>	2/24/47
Worcester Gas Light Co.	1,145,600	25	1,145,600	2,900,000 <sup>8.</sup>	7/25/46

1. Registered 10-year notes
2. Bonds or Notes
3. Evidences of Indebtedness
4. Long term notes
5. Promissory Notes
6. 1st Mortgage Bonds
7. Registered Note
8. Serial Notes



ACCOUNTING

All annual returns required to be filed by gas, electric and water companies and municipal lighting plants were filed with the Department within the time prescribed by law.

Municipal Lighting Plants

The following is a list of the municipal plants with their percentage of earnings which, from returns filed in 1947 for the year ended December 31, 1946, appear to have violated the provisions of the statute requiring such plants to reduce their rates when they have earned a profit in excess of the 8 per cent allowed:

Ashburnham	11.71%	Merrimac	10.36%
Littleton	9.89%	North Attleboro	9.86%
Mansfield	14.76%	South Hadley	8.11%
Templeton	8.59%		

The Littleton, Mansfield and Templeton plants have filed new schedules of reduced rates effective in the early part of 1947.

The Town of Ashburnham also failed to comply with the terms and provisions of the statute in that the plant failed to charge and the town failed to appropriate the correct amount for street lighting in 1946. The plant received \$950.00 from the town for street lighting when the amount should have been \$1,822.60 under the statute.

On March 3, 1947, the Department in accordance with the provisions of section 69 of chapter 164 of the General Laws (Ter. Ed.) voted to request the Attorney General of the Commonwealth to bring suit in the name of the Department to compel the municipal lighting plant of the Town of Ashburnham to comply with section 58 of chapter 164. The Attorney General filed suit and after hearing and conferences, the town agreed to see that the correct amount was appropriated for street lighting in the future and also filed new schedules of rates containing reductions effective June 1, 1947. The suit was thereupon withdrawn at the request of the Department.



The electric rates and charges of 33 electric companies were voluntarily reduced by the companies after several conferences with the Commission during the fiscal year, with annual savings to customers estimated as follows:

ESTIMATED ANNUAL REDUCTIONS IN ELECTRIC RATES

from

July 1, 1946 to June 30, 1947 Inclusive

<u>Company</u>	<u>Reduction</u>
Amesbury Electric Light Company	\$ 3,500.00
Athol Gas and Electric Company	7,200.00
Attleboro Steam and Electric Company	5,650.00
Beverly Gas and Electric Company	8,650.00
Boston Edison Company	12,000.00
Brockton Edison Company	7,987.00
Cambridge Electric Light Company	56,900.00
Central Massachusetts Electric Company	44,000.00
Fall River Electric Light Company	10,590.00
Fitchburg Gas and Electric Company	40,442.00
Gardner Electric Light Company	10,960.00
Gloucester Electric Company	17,670.00
Haverhill Electric Company	2,422.00
Lawrence Gas and Electric Company	20,365.00
The Lowell Electric Light Corporation	31,060.00
Lynn Gas and Electric Company	58,696.00
Malden Electric Company	42,700.00
Manchester Electric Company	5,200.00
New Bedford Gas and Edison Light Company	62,565.00
Northampton Electric Light Company	12,531.00
Northern Berkshire Gas Company	21,895.00
Norton Power and Electric Company	3,000.00
Plymouth County Electric Company	10,000.00
Quincy Electric Light and Power Company	9,400.00
Salem Electric Lighting Company	19,290.00
Southern Berkshire Power and Electric Company	2,146.00
The Spencer Gas Company	5,850.00
Suburban Gas and Electric Company	2,490.00
Wachusett Electric Company	56,900.00
Western Massachusetts Electric Company	158,672.00
Weymouth Light and Power Company	600.00
Winchendon Electric Light and Power Company	4,160.00
Worcester County Electric Company	54,100.00
Total	\$809,591.00



Gas, Electric and Water Utilities

The Division of Gas, Electric and Water Utilities during the past year has performed its customary Departmental duties relating to gas and gas meter inspections, together with investigations relating to equipment, charges and quality of services supplied by the various gas, electric and water companies. The Division's work for the year may briefly be summarized as follows:

The Division, during the past year, inspected and tested 115,388 gas meters as required by statute. Those meters found correct were sealed and badged as required. The number of meters tested was about 45 per cent greater than during the previous year. This number is not as great as required to be tested under statutory provisions, partly due to the shortage of materials and tin. It is expected that this number will be increased during the coming year. There were tested 86 gas meters on complaint and of this number 44 were found to be incorrect, that is, inaccurate by two or more per cent. The Division calibrated five 5-foot provers, one 10-foot prover, six experimental wet laboratory gas meters and five calorimeter thermometers.

One electric meter was officially tested on complaint for accuracy, during the past year. During the course of our investigations a number of electric meter inspections and checks for accuracy were made in connection with the Division's investigation of electric complaints. It is the opinion of the Director of the Division that the five per cent tolerance in the accuracy of an electric meter, as allowed by statute, is excessive when the quality of electric meters is considered, and consideration might be given to a recommendation that



this allowance be reduced.

The Division made 441 inspections of gas relative to heat content, hydrogen sulphide, ammonia and sulphur. Of these inspections there were 49 instances where the calorific content of the gas was found below standard, and in 34 inspections hydrogen sulphide was present. Ammonia was found present on one inspection.

There were reported to the Commission the statutory violation with respect to hydrogen sulphide found in gas supplied by the Beverly Gas and Electric Company and the Gardner Gas and Fuel Company. In each instance the violation was excused as being due to unavoidable cause or accident. The number of inspections found in violation of the statute is, in my opinion, due to the greatly increased gas send-out of the companies, together with the poor quality of materials used in gas manufacture, coupled with the inability of the companies to obtain necessary new equipment.

A total of 508 accidents of serious or fatal personal injury involving gas and electricity were reported to the Department. Of this number, gas was involved in 473 cases, of which 128 were fatal. Electricity was involved in 35 accidents, of which five resulted in fatalities. All accidents appearing to require investigation were considered by the Department.

The Department made an investigation of the butane air gas explosion at Onset, supplied by the Buzzards Bay Gas Company which resulted fatally to nine and personal injury to 30 other persons. This was the subject of a special report to the Commission.

The Department received and investigated 394 complaints relating to charges, rates, quality of service and extensions of the various companies. Of this number, 237 were attributed to electric companies,



131 to gas companies and 28 to water companies. These complaints were considered informally and invariably adjusted to the satisfaction of the complainants, without the necessity of formal hearings. The continued shortage of construction materials, coupled with the added demands for gas and electric service has been responsible for many of the complaints made to the Department.

During the year there was a substantial shortage of fuel of all types occasioned by strikes and consumer demands and this resulted in the Department collaborating and investigating the possible shortage or curtailment in the supply of gas and production capacities in the Taunton, Springfield, Brockton, and Framingham areas. In connection therewith, a survey was made of the production and distribution capacities, together with the actual and anticipated demands for gas of all gas companies operated in the Commonwealth.

Three of the companies increased the calorific content of gas supplied to their customers during the past year and the Division collaborated in the conversion of distribution systems from the customary 528 standard to the higher heat content. The Gardner Gas and Fuel Company changed from 528 Btu manufactured gas to an 850 Btu propane air gas. The Buzzards Bay Gas Company changed part of its system from a 528 butane air gas to an undiluted propane vapor gas of 2500 Btus per cubic foot. The Cambridge Gas Light Company is now in the process of changing from 528 Btu manufactured gas to a 951 Btu oil gas. Due to the increased demands for gas and the limited production and distribution facilities, many companies are seeking to increase their capacity by increasing the heat content of gas supplied, and undoubtedly there will be further changes in the future to be considered by this Department.



A survey of the number of gas meters tested by various companies was made and an appropriate letter was sent to those companies whose gas meter tests were below the average, calling their attention to section 115A of chapter 164 of the General Laws.

Investigations were made and written reports were submitted to the Commission relative to the approval of the Montaup electric agreement (D.P.U. 7638); an issue of Montaup Electric Company stock (D.P.U. 7751); the purchase of Montaup stock by the Brockton Edison Company (D.P.U. 7752); and quality of water supplied by the Sunderland Water Company (D.P.U. 7596).

An investigation and survey were made relative to electric service lines in the towns of Warwick and New Salem which resulted in substantial extensions of electric lines into these two communities.

Assistance was rendered in the preparation of various orders of the Commission authorizing increases in rate schedules of several gas companies, and on the application of fuel adjustment clauses in various gas and electric schedules.

There were several other investigations made of less importance during the year, and the Division on many occasions collaborated with other Divisions in matters relating to Department policy and the practices of various utility companies.

The Division received and accounted for \$29,412.35 in fees received for the testing of gas and electric meters during the year. This sum is approximately \$9000 more than received in 1946.



Engineering Division

During the fiscal year the Engineering Division checked the plant accounts and inspected the property of the following companies in accordance with D.P.U. 4980:

<u>Company</u>	<u>Years Checked</u>
Brockton Gas Light Company	4
Provincetown Light and Power Co.	2
Wachusett Electric Company	13
Cape and Vineyard Electric Company	1
Boston Elevated Railway Company	1
Spencer Gas Company	17
Plymouth County Electric Company	1
Southern Berkshire Electric Company	18
Union Light and Power Company	17
New Bedford Gas and Edison Light Company	1
Dedham & Hyde Park Gas Company	5
Milford Electric Light Company	14
Montaup Electric Company	4
Springfield Gas Light Company	9
Gilbertville Water Company	Valuation
Worcester Street Railway	9
Malden & Melrose Gas Light Company	10
Winchendon Electric Light & Power Company	19
Taunton Gas Light Company	9
Lowell Gas Light Company	1
Dedham Water Company	9
Marlborough Electric Company	10
	<u>174</u>

The plant accounts of the following companies were checked but the property not yet inspected:

<u>Company</u>	<u>Years Checked</u>
Edgartown Water Company	19
Athol Gas and Electric Company	17
Boston and Albany Railroad	1
Gardner Electric Light Company	16
Amesbury Electric Light Company	18
Fall River Electric Light Company	21
Worcester County Electric Company	1
Central Mass. Electric	<u>19</u>
	112



The following plants were inspected. (Exhibits not checked in this period.)

Salem Electric Company  
Turners Falls Electric Company  
Western Mass. Electric Company  
Worcester Suburban Electric Company  
Norwood Electric Light Department  
Taunton Municipal Light Plant  
Mansfield Municipal Light Plant  
Peabody Municipal Light Plant  
Ashburnham Municipal Light Plant

Prepared data requested by Mr. Hunter of the California Railroad Commission.

Made study and wrote report on request of Monsanto Chemical Company for changes in rules for inspection of locomotive boilers.

Was represented on a joint study and report with the Division of Smoke Abatement on smoke conditions at Beacon Park engine terminal of Boston and Albany Railroad.

Attended conferences with Mr. Leffler and Associates on cost studies of Lynn Gas and Electric Company.

Investigated and reported on six petitions for exemptions from local zoning laws.

Assisted the Metropolitan Transit Recess Commission.

Assisted the Commission on Administration and Finance in a matter regarding the Bedford Airport electric lines.

Estimates of cost were made for the extension of the East Boston Tunnel from Maverick Square to Orient Heights, East Boston, as required by section 5 of Chapter 692 of the Acts of 1945, as amended by Chapter 494 of the Acts of 1946.

Investigation was made of stresses in floor and floor members at 100 Nashua Street, Boston, for proposed storage of number plates.

Inspection was made of construction of a building located partly



over Cambridge Subway, Putnam Square, Cambridge.

Investigation was made of damage to Railroad drawbridge, Beverly-Salem by an oil barge.

This Division assisted in preparing the April 1, 1947 report including revising estimates of cost and construction of proposed rapid transit extensions for the Metropolitan Transit Recess Commission:

Savin Hill to Braintree  
Sullivan Square to Reading  
Lechmere to Woburn  
North Station to Sullivan Square

Investigation was made to determine the most convenient and safe detour for Central Greyhound Lines, Inc. in Pittsfield. Similar investigations were made in Northampton and Fitchburg.

Special investigation and inspection was made of wharf at Pemberton, Hull, used by steamboats of the Boston and Nantasket Beach Steamboat Company.

Inspection was made of 147 proposed bus routes which included 440 bridges and 106 crossings at grade with steam railroads.

Special inspection was made of one railroad side track bridge (over which operation was suspended by Department order).

Special inspections of two street railway bridges were made (over which operations were suspended by Department orders).

Hearings were conducted and reports submitted on the following matters:

On establishing a side track crossing of public way at grade.

On investigation for increased rates and charges for the transportation of passengers for hire by motor carriers.

On investigation of the propriety of rates and charges for transportation of property for hire by motor carriers.

On investigation of the propriety of rates and charges for the transportation of property by rail carriers.



On petition for exemption of certain lands from zoning by-laws.

On petition for determination that construction, maintenance and operation of certain transmission lines is in the public interest.

Boston Elevated Railway Company permit for operation of trackless trolleys in the city of Boston (two cases).

Boston Edison Company for exemption of certain lands from the zoning by-laws of the towns of Sherborn, Natick and Framingham.

Cape and Vineyard Electric Company for determination of a certain transmission line to be in the public interest.

Depreciation of municipal electric plants, Taunton, Marshfield and Norwood.

Eastern Massachusetts Electric Company for consent to construct and maintain certain conduits in Beverly and Salem.

Gardner Electric Light Company for determination that public necessity and convenience require certain locations be granted.

Lynn Gas and Electric Company for exemption of certain lands in Marblehead from zoning by-laws.

Boston Edison Company for determination that public convenience and necessity require locations for certain poles, conduits, etc. in the city of Boston.

Boston Elevated Railway Company for certain changes in Dudley Street Terminal.

Boston Edison Company locations in Brookline and Boston.

Plymouth County Electric Company for construction of transmission line between Wareham and Kingston.

Worcester County Electric Company for determination that certain lands be exempted from zoning by-laws in Worcester.

Boston Edison Company for exemption from zoning by-laws in Saxonville.



The following tariffs, schedules and contracts were filed during the fiscal year:

	<u>Freight</u>	<u>Passenger</u>
Railroads. . . . .	1405	122
Steamship. . . . .	10	20
Express. . . . .	76	-
Motor Trucks . . . . .	4675	-
Street Railways and Buses. . . . .	-	161
Aircraft . . . . .	14	27
	<u>Service</u>	
Telephone. . . . .	64	
Telegraph. . . . .	9	
	<u>Sale</u>	
Electricity. . . . .	222	
Gas. . . . .	164	
Water. . . . .	3	
Gas, Electric and Water Contracts. . . . .	144	
Total. . . . .		7116
Orders issued for filings on less than statutory notice. . . . .		195
Joint board hearings attended in conjunction with the Interstate Commerce Commission. . . . .		18
Tariffs examined and rejected. . . . .		1127
Hearings on Rates attended or conducted:		
Railroad rate cases . . . . .		2
Motor Truck rate cases. . . . .		10
Bus Rate Cases. . . . .		4
Tariffs examined and accepted. . . . .		4387
Complaints on rates investigated . . . . .		158



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PROTECTED CROSSINGS						UNPROTECTED CROSSINGS					
Boston & Albany R.R. Boston & Maine R.R. N.Y., N.H. & H. R.R. Central Vermont Ry. Hoosac Tun. & Wilm. Ry. Fore River R.R. Grafton & Upton R.R.	Number of Crossings	Killed	Injured	No. Injuries	Ratio of Casualties to Crossings	Number of Crossings	Killed	Injured	No. Injuries	Ratio of Casualties to Crossings	
	65	1	6	3	1-65	74	2	2	1	1-18	
	395				1-43	183		4		1-36	
	340				1-42	260		9		1-28	
	6				0-6	37		1		1-37	
	7				0-7	2				0-2	
	806	4	14	6	1-44	590	3	16	1	1-31	

# GRADE CROSSING ACCIDENTS INVESTIGATED

No. Involving motor vehicles	No. Involving pedestrians
27	3

No. accidents at protected crossings....	16	No. accidents train struck vehicle....	27
No. accidents at unprotected crossings..	14	No. accidents vehicles struck train...	3

No. accidents during daylight	20	Passenger trains involved in	15	accidents
No. accidents during darkness	10	Freight trains involved in	13	"
No. at public crossings	26	Light engines involved in	1	"
No. at private crossings	4	Track motors involved in	1	"



### Railroad and Street Railway

During the fiscal year the Division of Railway and Bus Utilities made 31,888 inspections of rolling stock including locomotives, passenger and freight cars; 4,205 inspections of street railway cars; 539 trackless trolley coach inspections; 1,080 inspections of railway and street railway bridges; 4,160 inspections of railroad and street railway automatic and interlocking signals; 114 inspections of interlocking remote control and centralized traffic control protection. In addition, stations, switches and derails, foot blocking, bridge guards and crossing signs were inspected. Defective conditions were called to the attention of the proper officials of the companies and corrections were made.

The Division investigated 199 accidents and 720 delays on railroads, 15 accidents and 275 delays on street railways, and was represented at 11 railroad inquests on railroad accidents and 4 inquests on street railway accidents. There were 113 complaints relative to railroad operation and 5 re street railways which were investigated and adjusted. Forty-four special investigations and studies were made on grade crossing protections.

The Division issued 45 police licenses to railroad and street railways and 3 to a steamship line.

### Motor Bus Transportation

At the close of the fiscal year there were 163 persons, associations or corporations (including street railway companies) operating buses within the Commonwealth for the carriage of passengers for hire.



Common (only)	10
Charter (only)	46
War Emergency (only)	13
Common and Charter (only)	39
Common Charter and War Emergency	38
Common and War Emergency (only)	1
Charter and War Emergency (only)	<u>16</u>
	163

Making a total of 88 carriers operating under certificates of public convenience and necessity granted by the Department, 139 operating under special or charter licenses granted by the Department and 68 operating under war emergency certificates issued under authority of Executive Order #11, which act was repealed as of June 30, 1947. On June 4, 1947 the legislature passed Act #482 which affected carriers holding special or charter licenses. As a result of this act the Division handled 141 applications for special service as provided for under said act.

In many instances it has become apparent that carriers who were operating under war emergency certificates in compliance with Executive Order #11 issued by His Excellency the Governor April 25, 1942, serving areas without any means of transportation, are still continuing to operate over these routes. At present there are 68 war emergency certificates outstanding as compared with 235 certificates issued.

There were 909 bus permits (including duplicate and amended permits) and 8,172 bus drivers licenses (including duplicates issued) for which fees aggregating \$16,285 were received.

The Division made 5,645 inspections of buses, 803 inspections of highway bridges on bus routes, and defective conditions were called to the attention of the proper officials and corrections were made. The Division also investigated 40 accidents, was represented at 1 inquest



and investigated and adjusted 101 complaints. There were 870 drivers examined for bus drivers licenses.

The Division also conducted hearings and conferences on matters pertaining to railroads, street railways and bus companies, and special studies of transportation were made in different parts of the Commonwealth as a result of applications from persons in areas to be served.

Acting under the authority of the provisions of Chapter 221 of the Acts of 1938, the Director and other members of the Division presided at 223 public hearings by the Department on matters pertaining to transportation of passengers for hire by railroads, railways and buses.



Commercial Motor Vehicle Division

During the fiscal year ending June 30, 1947, there were 1544 hearings held on new applications and amendments at central points throughout the Commonwealth by the director and his assistants; 880 transfer hearings were held during the same period and 3216 hearing notices were sent to common carriers who had failed to render continuous service. This division served on 46 joint board hearings held by the I.C.C. in connection with the issuance of interstate authority to motor carriers.

Under the provisions of Chapter 420 of the Acts of 1946 as amended by Chapter 52 of the Acts of 1947, effective February 13, 1947, the purpose of which was to curb the transfer or sale of inactive certificates to potential carriers at exorbitant fees. The division held hearings on 2846 cases at which the holders of common carrier certificates were notified to appear and show cause why such inactive certificates should not be revoked or revised for failure to render services authorized by said certificates. As a result of these hearings, 370 carriers requested that certificates be revoked; 1821 irregular route common carrier certificates and 26 regular route certificates were revoked by division order.

A total of 1648 investigations were made during this fiscal year; 1485 road checks were made by investigators and examiners of this division and 62 cases were prosecuted in the Courts of the Commonwealth.

A total of 422 complaints were received at this office and on these satisfactory adjustments were made.

As of June 30, 1947, there were 668 regular route common carriers; 8274 irregular route common carriers; 1186 contract carriers; 2212 in-



terstate carriers and 62 agricultural carriers and five brokers, all serving the public in this Commonwealth.

The Division received a net total of \$157,239.50 in fees during the fiscal year covered by this report. The total expenditures of the Division were \$85,494.81 for the same period.



Telephone and Telegraph Division

For the year ending on June 30, 1947, there were 1,369,294 stations, a net gain of 139,279 stations over the preceding year.

From July 1, 1946 to June 30, 1947, inclusive, there were 1,336 complaints made to the division which required special investigations.

Thirty exchange boundary changes were made during this fiscal year. These changes were of benefit to the subscribers in these areas.

On August 5, 1941, a change of boundary between the Fitchburg and Leominster exchanges was approved by the Department of Public Utilities. This change was made in order to serve the Fitchburg Airport from the Fitchburg exchange, and was made in conjunction with an act of the Legislature, Chapter 37, approved February 27, 1941, which act authorized the annexation by the City of Fitchburg of a part of the City of Leominster and also authorized the annexation by the City of Leominster of a part of the City of Fitchburg. Because of war conditions, plans for developing the Airport were held up by the City of Fitchburg and the field was leased to the Jennings Brothers Air Service to train aviators. Service was furnished this company from the Leominster exchange due to the desirability of conserving materials and the exchange boundary was changed to include the administration building in the Leominster exchange. This change was effective July 20, 1942. It was thought that after the war the boundary would be restored to its former position, thereby including all of the airport property within the Fitchburg exchange. The Telephone Company was advised by the Airport Commission that the Wiggins Airways had



been granted a franchise to operate a "feeder line" to Airports from Boston to Albany and that Fitchburg local exchange service was desired. The Wachusett Aviation Corporation also required Fitchburg service; also the Jennings Brothers Air Service, which had been furnished Leominster service, wished to have Fitchburg service. These changes became effective October 11, 1946.

As a war emergency measure, on October 1, 1942, Castle Island, the U.S. Army Reservation, was made part of the Central Exchange. The Army released this area to the Boston Port Authority and as a consequence, the area has again become part of the South Boston exchange as of January 30, 1947.

Effective February 3, 1947, the exchange boundary between Shirley and Ayer was changed so as to transfer from the Shirley exchange to the Ayer exchange an area of Fort Devens now being used by Harvard University and Mass. Institute of Technology in connection with the U.S. Government veterans' educational program. This arrangement permitted the Telephone Company to provide 24-hour service for the colleges, faculty, students, contractors and others to whom the U.S. Army did not wish to provide service through their official board at Fort Devens. The area involved has been included within the base rate area of the Ayer exchange. This area has been transferred from Shirley to Ayer only to meet the emergency resulting from this special university extension program and it will be restored to the Shirley exchange, to which it belongs, when the emergency has expired. The boundary of the Ayer base rate area was extended to include all buildings used by Mass. State College for administration purposes in this locality. At the time of the filing of the proposed change (January



3, 1947) the base rate area boundary passed through some of these buildings and it would have been difficult to determine the location of a telephone within one of these buildings with respect to the base rate area boundary for the application of mileage charges. This slight extension of the base rate area eliminated this condition by including all of the administration buildings within the base rate area.

A new classification of telephone service known as Mobile Telephone Service was introduced. Mobile Telephone Service is a communication service through a land radiotelephone station between a wire telephone and a mobile unit or between two mobile units involving the combined use of land facilities and radio channels.

As of November 4, 1946, the service was furnished in the Boston Mobile Service Area which consisted of the Boston Central Exchange and all other exchanges in Massachusetts within a radius of approximately 25 miles of Boston. The construction of a radio transmitting and receiving station on the Telephone Company building at Bowdoin Square, Boston, was completed as well as six remote receiving stations at different points in the Mobile Service Area.

On January 20, 1947, a revision in the regulations was made to permit use of Mobile Service by transients renting cars.

On April 10, 1947, the introduction of Mobile Telephone Service was offered in the Springfield Area and on May 12, 1947, was introduced as a public offering in the Worcester Area.

After the delivery of the next Boston telephone directory, the telephone numbering plan will be changed so as to have the first two instead of the first three letters of central office names in capitals



and to have five figures instead of four. The change to a two-letter plan will be made in anticipation of future operating requirements. In all cases the change will consist only of the substitution of a figure for the present third letter, except that three central office names will also be changed, as follows: ARNold to Jamaica 4, RUGgles to HIGhlands 2, and PERkins to WATertown 3. The new plan also prepares the way for nationwide dialing by operators of long distance calls, a development that will come to the Boston area within a few years.

The material situation is still acute. Many thousands of applications are being held due to shortage of central office equipment and outside plant facilities. For these reasons, priorities, under so-called Schedules A, B, and C, have remained in effect.

The number of requests which have been made by subscribers to the division for better grades of service has reached a preponderous proportion but it has seemed reasonable that the large number of applicants waiting for service should be furnished some class of service before regrades were taken care of, except in those cases where an A priority prevailed.



### Division of Smoke Inspection

The personnel of the Division consisted of a Chief Inspector, eight assistant inspectors and two women clerks. The return of two of the assistant inspectors from service in the U. S. Navy filled two regular positions, one of which had been vacant all of the preceding year, and the other occupied by a military substitute.

The territory covered by the Division showed no change - it is still 29 cities and towns including Boston. This territory has an area of 290 square miles with a population of approximately two million people.

Violations increased by 38 over the previous year, or a total of 963 in 1947 as against 925 in 1946. The return to the Division of the above-mentioned inspectors from the armed forces resulted in more effective coverage of the territory and was a factor in detecting more violators. It is interesting to note in analyzing this increase that a group of 25 of the most persistent violators of the preceding year, accounting for 12% of that year's total, cut their violations by almost 50% through concerted effort on the part of the Division. Also, 216 stacks violated only once throughout the year, while 61 stacks violated but twice.

The increase in locomotive violations (115 in 1946 to 146 in 1947) was due in a large part to vigorous inspection on the part of the Division for the purpose of assembling data for the Special Recess Commission set up by the Legislature to study further regulation of coal burning locomotives.

The Division was called upon by this Special Commission for the benefit of its experience and was able to furnish all the requested



information. After a thorough study, which is contained in House Document No. 1673, the Commission reported back to the Legislature and advocated certain amendments to Chapter 651 of the Acts of 1910, under which this Division operates, as well as Chapter 140 of the General Laws, which regulates smoke emission outside of our territory.

These amendments were incorporated in Chapter 492 of the Acts of 1947, which upon passage by the Legislature was signed by the Governor on June 4, 1947. It became law on July 4, 1947. Consequently, it was not applicable in the fiscal year ending June 30, 1947.

The Division made 559 plant calls, held 26 office conferences, received and investigated 200 complaints and held two hearings.

	<u>1946</u>	<u>1947</u>
Observations on Stationary Stacks	244,774	253,361
Observations on Locomotive Stacks	36,375	32,690
Observations on Marine Stacks	<u>7,813</u>	<u>5,624</u>
Total.....	288,962	291,675
Violations on Stationary Stacks	742	781
Violations on Locomotive Stacks	115	146
Violations on Marine Stacks	<u>68</u>	<u>36</u>
Total.....	925	963

Observations were made on 4453 stationary stacks and on 4095 no violations were noted. There were 358 violations, 15 of which were public service stacks, 191 manufacturing stacks and 152 office building and apartment house stacks.

Of the 781 violations reported on stationary stacks, 313 were on oil burning plants, 416 on coal burning plants, 50 burning wood or rubbish and 2 gas plants.



Stationary violations on:

	<u>1946</u>	<u>1947</u>
Class I Stacks	655 - 88.27%	701 - 89.76%
Class II Stacks	77 - 10.38%	70 - 8.96%
Class III Stacks	<u>10 - 1.35%</u>	<u>10 - 1.28%</u>
	742 100.00%	781 100.00%

	<u>Stationary Violations</u>		<u>Complaints Received</u>	
	<u>1946</u>	<u>1947</u>	<u>1946</u>	<u>1947</u>
Arlington	0	2	0	2
Belmont	0	0	3	0
Boston	593	621	67	114
Braintree	7	3	3	0
Brookline	9	1	7	9
Cambridge	31	27	7	16
Canton	2	3	0	0
Chelsea	11	21	1	2
Dedham	2	3	0	1
Everett	5	5	1	2
Lynn	4	10	2	7
Malden	2	8	8	2
Medford	13	7	4	4
Melrose	0	0	0	0
Milton	1	1	2	2
Needham	1	1	0	0
Newton	1	3	4	5
Quincy	17	14	2	8
Revere	1	0	1	0
Saugus	0	0	0	0
Somerville	21	32	8	10
Stoneham	0	0	0	0
Wakefield	0	0	1	1
Waltham	5	0	2	1
Watertown	7	6	4	9
Weymouth	8	3	1	1
Winchester	1	1	0	0
Winthrop	0	0	1	0
Woburn	0	9	3	4
Total	742	781	132	200



The Division has operated at a cost of approximately \$38,449.09, divided as follows:

Salaries	\$35,523.86
Travel	1,144.09
Rental	1,234.80
Telephone	133.91
Supplies	<u>412.43</u>
Total	\$38,449.09

Attached hereto is a table showing the assessments against each of the 29 cities and towns in the Smoke District for the year 1947, and a map showing the territory which the Smoke Law covers.

Assessments

Division of Smoke Inspection

<u>Cities and Towns</u>	<u>1946</u>	<u>1947</u>
Arlington	\$ 454.46	\$ 726.59
Belmont	429.67	687.37
Boston	11,725.69	19,141.44
Braintree	227.10	360.87
Brookline	1,055.90	1,687.92
Cambridge	1,379.03	2,212.37
Canton	66.78	107.31
Chelsea	343.83	546.05
Dedham	204.96	328.78
Everett	634.77	1,046.45
Lynn	1,079.55	1,706.50
Malden	562.16	898.30
Medford	630.17	1,007.15
Melrose	319.08	509.48
Milton	312.79	497.00
Needham	220.87	353.40
Newton	1,364.25	2,195.00
Quincy	1,056.54	1,695.13
Revere	319.90	507.74
Saugus	130.05	207.33
Somerville	937.86	1,512.73
Stoneham	118.45	188.91
Wakefield	181.13	292.78
Waltham	427.55	683.39
Watertown	419.05	673.85
Weymouth	421.31	675.55
Winchester	272.92	439.86
Winthrop	193.90	309.21
Woburn	<u>165.66</u>	<u>266.62</u>
Total	\$25,655.38	\$41,465.08
Cost		
Per Capita	\$ 0.0137	\$ 0.0221



Division of Investigation of Securities

The major portion of the work of the Division has been the examination and the qualification of securities with an aggregate capital of \$1,750,587,419.

The information filed with the Division in connection with the qualification of securities was examined for the purpose of ascertaining the assets and liabilities, provisions for dividends and voting rights.

All applicants for registration as salesmen and brokers were examined as to their qualifications for registration and knowledge of securities. They were also required to file information under oath, as to their past occupations, criminal record, if any, character and other information for the purpose of determining whether or not they had the moral character and integrity to be registered.

Twelve complaints were received against registered brokers or salesmen. All complaints were investigated and were adjusted, or no evidence of fraud was found.

Investigations . . . . .	436
Brokers Registered . . . . .	450
Salesmen Registered. . . . .	2,085
Total Receipts, Fees for Registrations . . . . .	\$32,925
Securities Qualified . . . . .	288
Aggregate Capital of Securities Qualified for sale in this Commonwealth. . . . .	\$1,750,587,419



In accordance with the provisions of Section 32 of chapter 30 of the General Laws as amended by Chapter 499 of the Acts of 1939, the Department submits the following list of all rules and regulations made or promulgated by the Department and in force and effective on June 30, 1947:

<u>Date</u>	<u>Number</u>	<u>Accounting</u>
12/2/13	PSC 158	Re filing returns of all salaries of officers or employees of utility companies in excess of \$6,000.
5/27/21	DPU 104	Reclassification of accounts prescribed for gas and electric companies.
11/25/21	" "	Reclassification of accounts for municipal lighting plants.
1/1/34	" "	Amendment
10/28/21	" 573A	Re annual returns of water companies.
7/12/23	" 1073B	Re annual returns of water companies.
12/28/23	" 1073E	Re destruction of records of gas, electric and water companies and municipal lighting plants.
7/11/23	" 1287	Uniform system of accounts for water companies.
	" 3056B	Regulations for operation of buses and forms of accounting.
7/31/31	" 4240	Accounts, records, memoranda, forms of annual returns of common carriers, of gas and electric companies and of water companies.
12/29/33	" "	Amendment.
9/28/34	" "	"
3/18/38	" "	"
10/1/41	" "	"
7/27/43	" "	Order of the Department adopting amendment to Uniform System of Accounts of the Interstate Commerce Commission, effective August 31, 1942.
6/15/45	" "	Amendment
7/19/45	" "	"
6/7/46	" "	"
4/24/47	" "	"
11/24/43	" "	Order of Department dated November 24, 1943, relative to annual returns of bus companies having gross revenues of over \$100,000 and prescribing new forms for those having gross revenues of less than \$100,000 annually, to be effective January 1, 1945.
12/9/32	---	Uniform system of accounts for railroad subsidiary motor transportation companies.



<u>Date</u>	<u>Number</u>	<u>Accounting</u>
7/14/32	DPU 4447	Lending money by gas and electric companies under provision of c. 132 of Acts of 1932.
3/24/33	" "	Amendment
6/15/42	" "	"
12/24/35	" 4980	Filing of schedules of additions and betterments to properties and schedules of property abandoned or removed during preceding calendar year.
2/6/36	" "	Instructions to accompany orders relative to capital expenditures.
<u>Rates and Tariffs</u>		
Regulations established by Massachusetts Department of Public Utilities under authority of Chapter 159B of the General Laws, as amended, relating to motor carriers and brokers and defined in said act, cancelling rules and regulations contained in D.P.U. 4926 dated February 12, 1934 and D.P.U. 5739, effective November 30, 1938.		
2/13/42	" 6710	Rules and regulations for filing of tariffs and schedules, cancelling rules and regulations contained in order dated July 15, 1927 as amended by order dated June 23, 1933 (D.P.U. 4600-I), as to common carriers (except of property by motor vehicle) gas, electric and water companies.
8/19/42	" 6527Z	Authorizing senior rate engineer and assistant rate engineer to approve petitions of common carriers to file tariffs on less than statutory notice and to approve petitions for waiver of rules relating to form and filing of tariffs as set forth in DPU 6705.
10/13/42	" 6527AB	No schedule of rates containing general increases shall be accepted for filing unless accompanied by copy of 30-day notice regarding such increase under Executive Order of the President of the United States, dated October 3, 1942 and relative to the timely intervention by a Federal Agency.
10/13/42	" 6527AC	All tariffs of common carriers containing increases presently on file and not yet effective as of this date shall be suspended and deferred until December 1, 1942, unless otherwise ordered by the Department.
<u>Commercial Motor Vehicles</u>		
5/1/42	6705	Part I--General: Condition of issuance of certificate. Amendments in certificate of permit.



<u>Date</u>	<u>Number</u>	
5/1/42	DPU 6705	<u>Commercial Motor Vehicles</u> Transfer and assignment of rights and Interstate licenses. Insurance. Determination of carriers' radius of operation. Denial of application for failure to file tariffs, schedules, or contracts. Filing of common carrier tariffs and contract carrier schedules. Extension of credit. Brokers' fees and tariffs. Enforcement. Distinguishing plates. Name of carrier on vehicle. Observance of other laws and regulations. Explosives and inflammable materials. Payment of C.O.D.'s. Payment of judgments. Narcotics and intoxicating liquor. Freight bills and records of transportation charges. Appeals or petitions to the commission. Agricultural carriers. Part II, governing form and filing of freight rate tariffs, schedules and contracts by motor carriers and brokers.
2/25/42	" 6527J	Prescribing form of application, permit and fees for transportation of property on the Lord's Day, under provisions of Executive Order No. 6.
11/27/42	" 6705BI	Prescribing distinguishing plate for 1943.
	" " C	Amendment, Rule 13.
	" " B2	Re distinguishing plate and tab.
8/19/31	" 4214	<u>Gas, Electric &amp; Water</u> Installation of automatic shutoffs for gas meters and approval of types of automatic devices, and amendments.
10/9/41	" 6527B	Specifications for device for sealing or marking gas meters during war emergency, in substitution of usual tag, because of inability to obtain certain materials.
10/21/41	" "	Amendment.
9/24/26	" 5527R	Electric meter tests and fees.
10/13/44	" 7027AV	Rules of gas, electric and water division.
2/8/29	---	<u>Smoke Abatement</u> Authority Section 4, c. 651, Acts 1910: All observations of smoke to be used as evidence at the trial of a person or



<u>Date</u>	<u>Number</u>	<u>Smoke Abatement</u>
		corporation for violation of an order of the board made under above authority shall be made in accordance with Ringelmann's smoke chart, as published and used prior to February 6, 1911 by United States Geological Survey. All such observations shall be recorded at the time that they are made and shall be made on at least three separate days within a period of 60 days. The records of all such observations shall be open to public inspection, in the presence of an employee of the Department, in the main office, when the main office is open.
9/27/34	---	The Division shall hereafter perform all functions of administration and enforcement of c. 651 of the Acts of 1910, and acts in amendment thereof and in addition thereto, imposed upon the Commission by said c. 651 and acts in amendment thereof and in addition thereto, except so much of s. 4 said c. 651 as provided as follows: "The board, with the approval of the Governor and Council, may make such rules and regulations as it deems advisable for its own government, for the government of its employees and assistants, for observation of smoke by the inspector of his duly authorized agents at reasonable intervals, and for keeping proper records of all observations."
		<u>Division of Investigation of Securities</u> In registering security brokers under provisions of c. 110A, an individual broker must at least have \$5000, either in cash or securities, in excess of his liabilities; a partnership, \$5000 for each member of the partnership; a corporation at least \$25,000 in cash or securities.  The maximum commission permitted in the sale of securities is 25 per cent for common stock, 15 per cent for preferred stock, and 10 per cent for bonds.  See D.P.U. 779.
		<u>Railway &amp; Bus</u>
11/8/20	DPU 300	Rules as to safety devices on street railway cars, and amendments.
12/24/31	" 4224	Rules and regulations under provisions of section 2, c. 135, Acts 1931. Signals by rail-borne motor cars operated on railroads.
3/11/32	" 4350	Rules, terms and conditions for operation of motor vehicles for carriage of passengers, for hire, and amendments.
5/23/40	" 4350CW 6027W	Re amendment to rule 1, above.



Date	Number	Railway & Bus, continued
3/27/44	DPU 4350	Amendment.
6/30/32	" 4437	Rules, terms and conditions for operation of sightseeing automobiles for carriage of passengers for hire, and amendment.
3/12/35	" 4888	Re equipment of railroad trains and cars with emergency tools and appliances.
12/4/36	" "	Further order.
10/22/42	" "	Further order.
5/13/42	" 6527N	Re operation of buses in charter or special service under c. 159A of General Laws and chapter 404 of Acts of 1939, and paragraph 4 of Executive Order No. 11.
6/28/46	" "	Order revoked on August 31, 1945.
6/1/42	" (6816) 6527T	Prohibiting street railway companies from discontinuing operation of street cars unless authorized to do so upon petition to Department, commencing June 3, 1942.
6/28/46	" "	Order revoked on June 28, 1946.
6/1/42	" 6527U	Suspending certificate of public convenience and necessity issued for operation of sightseeing automobiles carrying persons in or from City of Boston.
8/27/45	" "	Order revoked on August 31, 1945.
7/18/27	" 2903	Re bonds to be filed by licensees of motor vehicles for carriage of passengers for hire.
4/28/42	" 4571	Amendment to 2903, as to amount.
12/29/39	" 6000	Re bonds and insurance policies to be filed by licensees engaged in special or charter service.
4/14/43	" 7026	<u>General</u> Re notice of 14 days to be given for hearings before the Department.

Respectfully submitted,

Canall L. Meins  
Chairman

Francis M. McGeown

Barbara D. Endrey

John M. Whowley

Thomas A. Flaherty  
Commissioners